

REMARKS

Claims 1, 17, 24, and 26-39 are now pending. Upon entry of this amendment, the specification and Claims 1 and 24 will be amended. These amendments are discussed below with respect to particular objections or rejections. No new matter has been added and no new issues have been raised. Entry of this amendment is thus respectfully requested.

Applicants gratefully acknowledge the withdrawal of previous objections to the specification and claims as detailed in the current Office Action of 21 February 2003.

Amendments to the Specification

The SEQ ID numbers suggested by the Examiner have been added, and the corresponding sequence listing has been submitted both in printed and computer-readable format. These sequence listings are identical to those previously incorporated by reference from the published literature, and so do not constitute new matter, and are being added solely to facilitate examination. With the addition of the sequence listings, the previous sequence of the *P. shermanii* epimerase gene on page 67 has been deleted to avoid duplication.

Objections to the Drawings

The Examiner has objected to the drawings filed on May 14, 2002 (Figures 2-9) and on September 5, 2002 (amended Figure 4) as being allegedly informal for the reasons detailed on the PTO Form 948 appended to the current Office Action. The appended PTO Form 948 indicates that the drawings for Figures 3-9 are objected to due to the presence of copy machine marks, while the drawings for Figures 6 and 7 are objected to because of characters less than 1/8" in height.

New formal drawings are being submitted herewith to address these objections. A black and white version of Figure 4, previously submitted as a color figure, is being submitted, and so the legend for Figure 4 under "Brief Description of the Drawings" has

been amended to replace references to line color with references to line dotting/dashing. No new matter is added, and acceptance of the new drawings is respectfully requested.

Objections to the Specification

The examiner has objected to the specification for inappropriate notation of an internet address on page 48, lines 17-18. As this citation refers to nonessential background information, the specification has been amended so as to delete this internet address.

The examiner has objected to the specification for an incomplete reference on page 91. The specification has been amended so as to provide the complete citation.

In light of the amendments to the specifications, the Applicants respectfully request that the objections to the specification be withdrawn.

Rejections of the Claims

The examiner has rejected all of the pending Claims 1, 17, 24, and 26-39 as lacking written description under 35 U.S.C. §112, first paragraph. In particular, the Examiner states that

The instant claims, as broadly but reasonably interpreted, are drawn to **any** *P. shermanii* or an *S. cinnamomensis* mutA and mutB genes and **any** *P. shermanii* epimerase gene. The pending claims are NOT limited to those specifically disclosed in the art.

The Applicants respectfully disagree. The gene names "mutA" and "mutB" refer to specific genes in the organism in which they are found, and thus the mutA and mutB genes from *P. shermanii* and *S. cinnamomensis* represent well-defined species rather than genera. According to the accepted rules of gene nomenclature in molecular biology and microbiology, there is **one and only one** "mutA" or "mutB" gene in any particular organism; if a second gene is found which codes for a protein of the same function as mutA, for example, it must be given a gene name other than "mutA." Thus, the claims as presented are in fact drawn to specific examples of methylmalonyl CoA mutase genes known in the art, and would be recognized as such by one skilled in the art.

In order to expedite examination, however, the gene sequences of the *P. shermanii* and *S. cinnamomensis* mutA and mutB genes have been supplied as SEQ ID Nos: 1, 2, 3, and 4, as recommended by the Examiner. Also, to avoid any possibility that might arise over the term "a *P. shermanii* epimerase gene," Claims 1 and 24 have been amended so as to specify the *P. shermanii* epimerase gene having the nucleotide sequence given in SEQ ID No. 5.

In light of the above amendments, the Applicants respectfully request that the rejection of Claims 1, 17, 24, and 26-39 under 35 U.S.C. §112, first paragraph, be withdrawn.

Summary

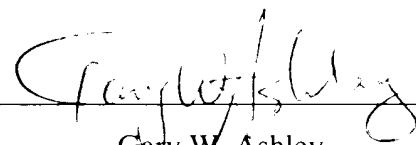
In conclusion, it is respectfully submitted that the claims and specification have been amended such that the objections and rejections are overcome, and the claims are in condition for allowance.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 50-2544** referencing docket no. 010025.01.

Respectfully submitted,

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By: _____



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